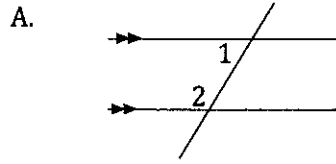


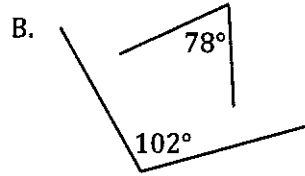
2.9 Transversals Practice!

Okay good, you're getting faster at it I bet. Let's do some matching. Write the letter of each picture in the right column in the blank next to its description in the left column.

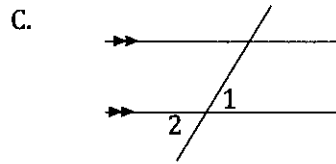
_____ 1. alternate interior angles



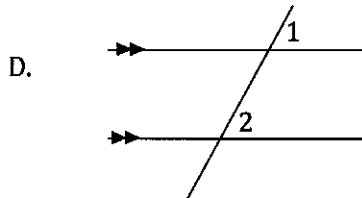
_____ 2. corresponding angles



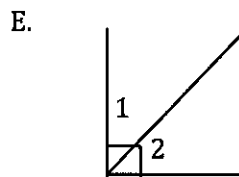
_____ 3. alternate exterior angles



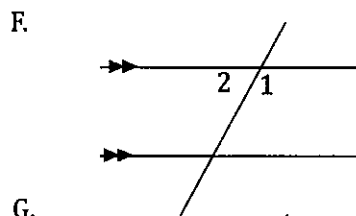
_____ 4. complementary angles



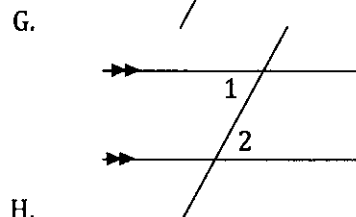
_____ 5. vertical angles



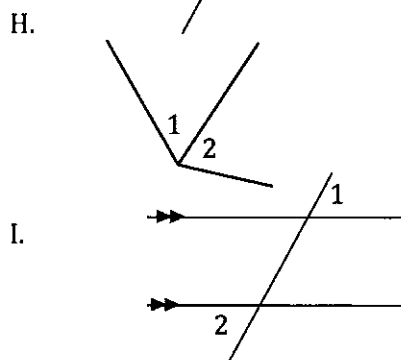
_____ 6. supplementary angles



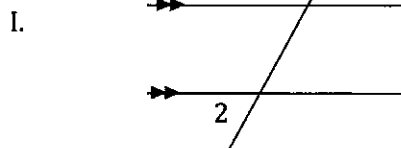
_____ 7. linear pair



_____ 8. consecutive angles

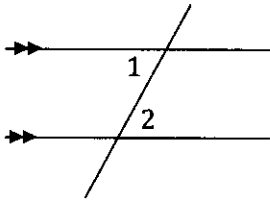


_____ 9. adjacent angles



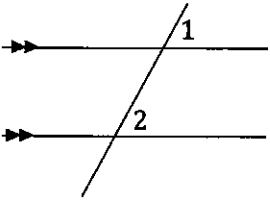
Let's take it up a notch... for each, write the angle relationship you see in the picture and a statement of whether the angles are equal or add to 180° .

1. This one is done for you so you know what to do.

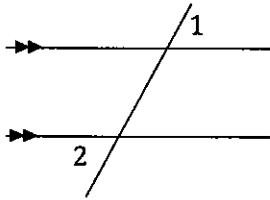


Alternate exterior, $m\angle 1 = m\angle 2$

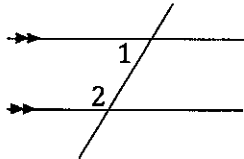
3.



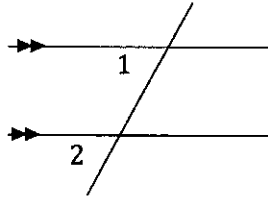
5.



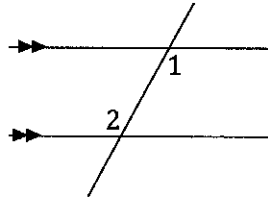
8.



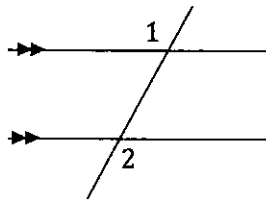
2.



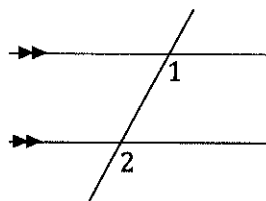
4.



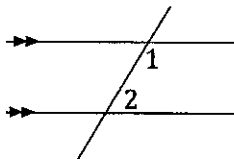
6.



7.



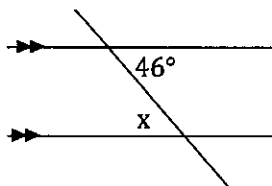
9.



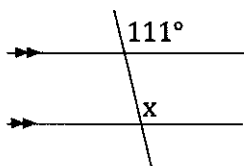
Great job!!

On these state the angle relationship, write a statement about whether they add to 180° or are equal, and solve for x if necessary.

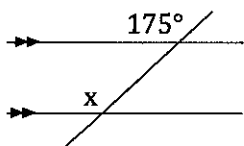
1. This one is done for you so you know what to do.



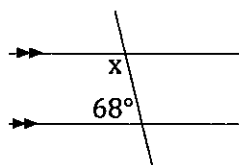
3.



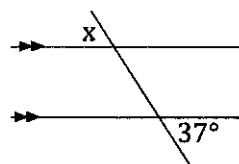
6.



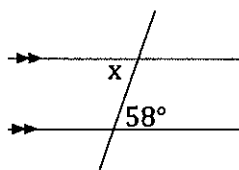
2.



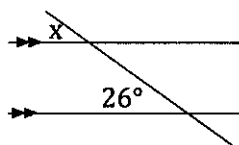
4.



5.



7.

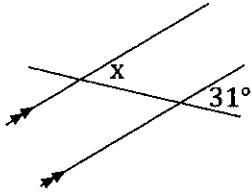


Bubble all the correct answers from above. Don't bubble incorrect answers.

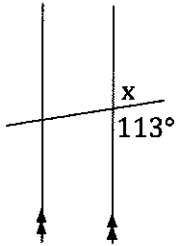
☐ 37° ☐ 143° ☐ 69° ☐ 46° ☐ 175° ☐ 122° ☐ 58° ☐ 68° ☐ 154° ☐ 26° ☐ 64° ☐ 112° ☐ 75° ☐ 111°

Don't worry about these, they are just rotated.

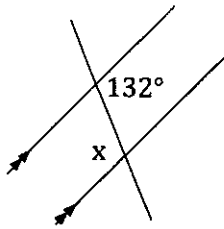
8.



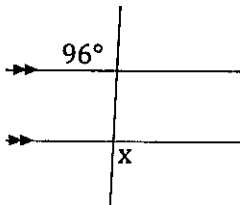
10.



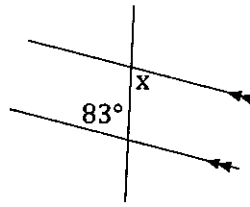
12.



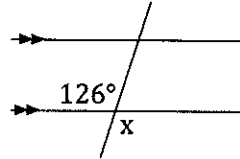
14.



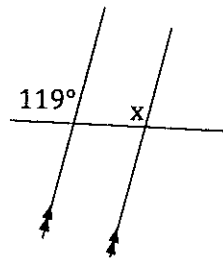
9.



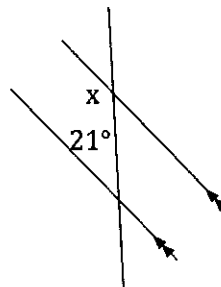
11.



13.



15.

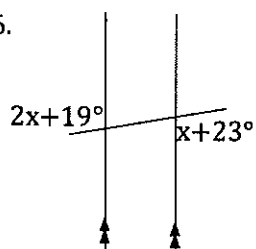


Bubble all the correct answers from above. Don't bubble incorrect answers.

☐ 31° ☐ 132° ☐ 54° ☐ 96° ☐ 159° ☐ 122° ☐ 83° ☐ 119° ☐ 154° ☐ 113° ☐ 67° ☐ 52° ☐ 58° ☐ 126°

On these state the angle relationship, write a statement about whether they add to 180° or are equal, and find the value of x .

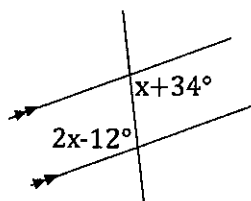
16.



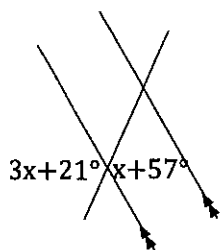
Alternate exterior

$$\begin{aligned} 2x+19^\circ &= x+23^\circ \\ -x & \quad -x \\ x+19^\circ &= 23^\circ \\ -19^\circ & -19^\circ \\ x &= 4^\circ \end{aligned}$$

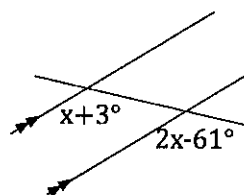
18.



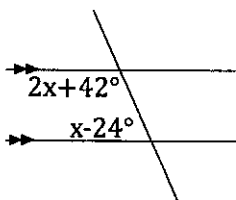
20.



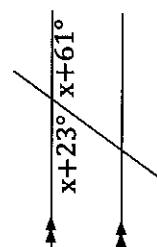
17.



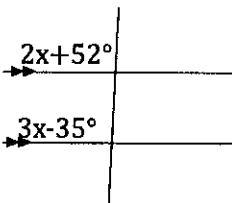
19.



21.



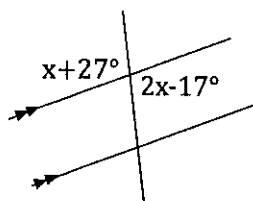
22.



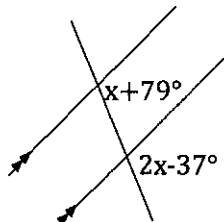
Bubble all the correct answers from above. Don't bubble incorrect answers.

☐ 72° ☐ 4° ☐ 12° ☐ 46° ☐ 18° ☐ 64° ☐ 54° ☐ 42° ☐ 30° ☐ 48° ☐ 97° ☐ 28° ☐ 87° ☐ 83°

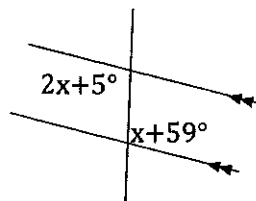
23.



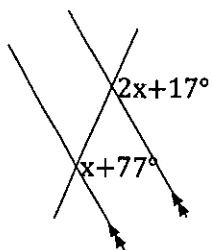
25.



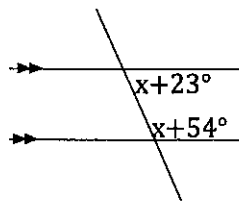
27.



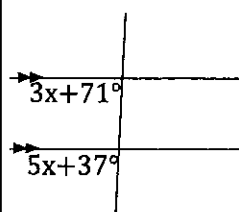
29.



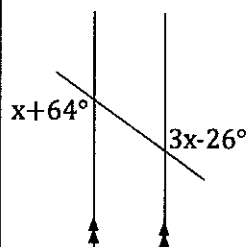
24.



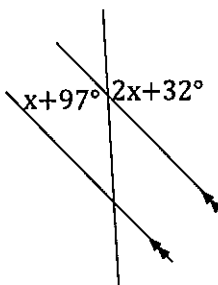
26.



28.



30.

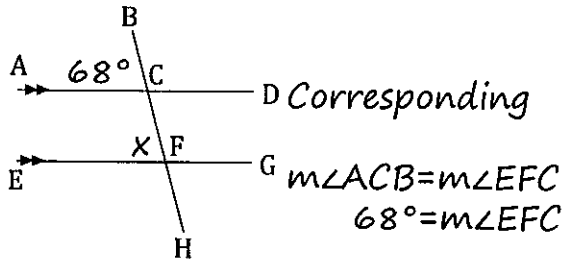


Bubble all the correct answers from above. Don't bubble incorrect answers.

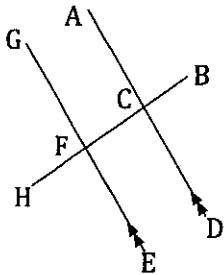
☐ 31° ☐ 116° ☐ 20° ☐ 17° ☐ 54° ☐ 98° ☐ 51.5° ☐ 45° ☐ 60° ☐ 72.5° ☐ 65° ☐ 44° ☐ 30.5° ☐ 24°

Mark the diagram with the given information, state the angle relationship, and then solve for the indicated angle.

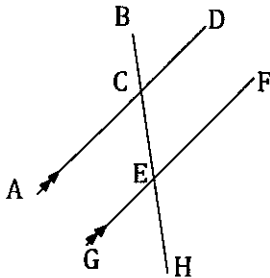
31. $m\angle ACB$ is 68° Find the $m\angle EFC$.



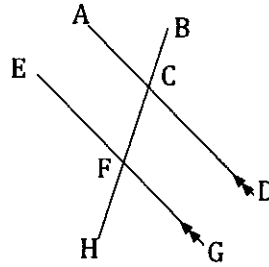
33. $m\angle EFB = 91^\circ$ Find $m\angle DCH$.



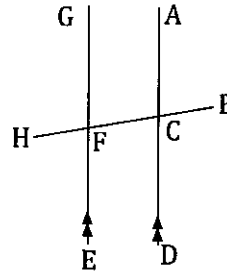
35. $m\angle GEH = 47^\circ$ Find $m\angle BEF$.



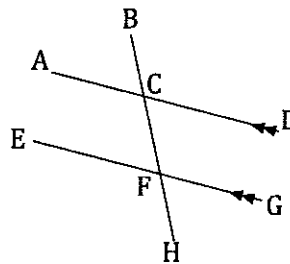
32. $m\angle DCH = 85^\circ$ Find $m\angle BFE$.



34. $m\angle HFG = 103^\circ$ Find $m\angle BCD$.



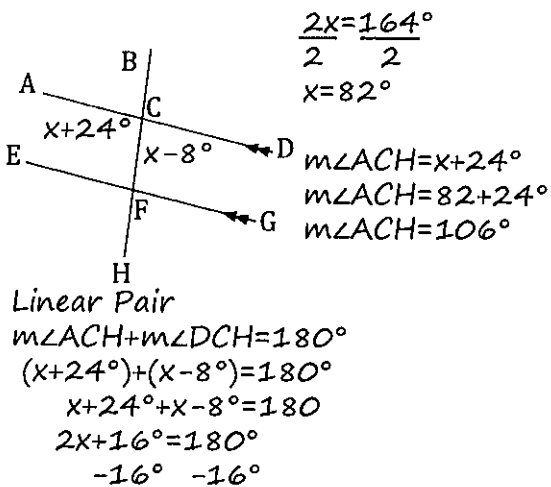
36. $m\angle DCH = 63^\circ$ Find $m\angle ACH$.



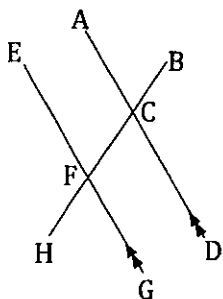
Bubble all the correct answers from above. Don't bubble incorrect answers.

☐ 112° ☐ 95° ☐ 91° ☐ 89° ☐ 47° ☐ 103° ☐ 63° ☐ 68° ☐ 77° ☐ 85°

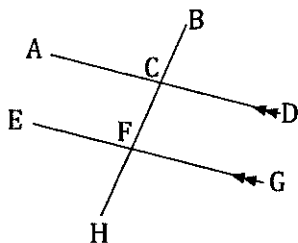
37. $m\angle ACH = x + 24^\circ$, $m\angle DCH = x - 8^\circ$. Find $m\angle ACH$.



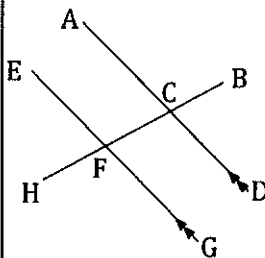
39. $m\angle EFH = 2x - 142^\circ$, $m\angle ACH = x + 16^\circ$. Find $m\angle ACH$.



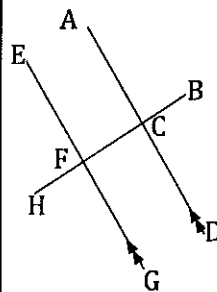
41. $m\angle BCD = x + 26^\circ$, $m\angle BFG = 2x - 24^\circ$. Find $m\angle BFG$.



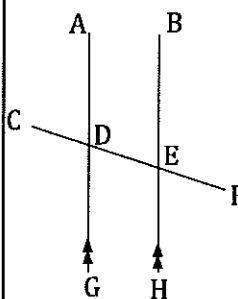
38. $m\angle ACB = 2x - 45^\circ$, $m\angle HFG = x + 23^\circ$. Find $m\angle HFG$.



40. $m\angle GFB = x + 32^\circ$, $m\angle DCH = x + 24^\circ$. Find $m\angle DCH$.



42. $m\angle ADF = 2x + 4^\circ$, $m\angle HEC = 4x - 14^\circ$. Find $m\angle HEC$.



Bubble all the correct answers from above. Don't bubble incorrect answers.

☐ 76°
 ☐ 110°
 ☐ 91°
 ☐ 94°
 ☐ 106°
 ☐ 97°
 ☐ 22°
 ☐ 165°
 ☐ 86°
 ☐ 92°